IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF VIRGINIA
ROANOKE DIVISION

JAMES R. PUTMAN,	)	
	)	
Plaintiff,	)	Civil Action No.: 7:17-cv-168
	)	
v.	)	
	)	
SAVAGE ARMS, INC.,	)	By: Hon. Michael F. Urbanski
	)	Chief United States District Judge
Defendant.	)	
	)	

MEMORANDUM OPINION

This products liability action arises out of a hunting accident on November 11, 2016 in George Washington National Forest in or near Alleghany County, Virginia. Plaintiff James R. Putman ("Putman") was hunting with a Savage 10ML-II stainless steel muzzleloader designed, marketed, and advertised by defendant gun manufacturer Savage Arms, Inc. ("Savage"), when the firearm's barrel exploded, severing Putman's right thumb. Putman's Second Amended Complaint, ECF No. 34, alleges negligent design (Count I), negligent manufacture (Count II), willful and wanton failure to warn (Count III), and breach of implied warranty of merchantability (Count IV). Putman voluntarily dismissed Count II. On January 8, 2019, Savage moved for summary judgment as to the remaining counts pursuant to Rule 56(a) of the Federal Rules of Civil Procedure. ECF No. 61.

Additionally, Putman moved for partial summary judgment in his favor as to a number of affirmative defenses raised by Savage in its Answer, all of which relate to

purported misuse of the 10ML-II muzzleloader and/or issues of proximate cause. ECF No. 59. Specifically, Putman urges the court to rule as a matter of law that his use of the PowerBelt bullet was not an unforeseeable misuse. Id. On February 1, 2019, the court held a hearing to address these and other outstanding motions. For the following reasons, both motions for summary judgment are **DENIED**.

I. Summary Judgment

Pursuant to Federal Rule of Civil Procedure 56(a), the court must "grant summary judgment if the movant shows that there is no genuine dispute as to any material fact and the movant is entitled to judgment as a matter of law." Fed. R. Civ. P. 56(a); see Celotex Corp. v. Catrett, 477 U.S. 317, 322 (1986); Glynn v. EDO Corp., 710 F.3d 209, 213 (4th Cir. 2013). When making this determination, the court should consider "the pleadings, depositions, answers to interrogatories, and admissions on file, together with . . . [any] affidavits" filed by the parties. Celotex, 477 U.S. at 322. Whether a fact is material depends on the relevant substantive law. Anderson v. Liberty Lobby, Inc., 477 U.S. 242, 248 (1986). "Only disputes over facts that might affect the outcome of the suit under the governing law will properly preclude the entry of summary judgment. Factual disputes that are irrelevant or unnecessary will not be counted." Id. (citation omitted). The moving party bears the initial burden of demonstrating the absence of a genuine issue of material fact. See Celotex, 477 U.S. at 323. If that burden has been met, the non-moving party must then come forward and establish the specific material facts in dispute to survive summary judgment. Matsushita Elec. Indus. Co. v. Zenith Radio Corp., 475 U.S. 574, 586–87 (1986).

In determining whether a genuine issue of material fact exists, the court views the facts and draws all reasonable inferences in the light most favorable to the non-moving party. Glynn, 710 F.3d at 213 (citing Bonds v. Leavitt, 629 F.3d 369, 380 (4th Cir. 2011)). Indeed, "[i]t is an 'axiom that in ruling on a motion for summary judgment, the evidence of the nonmovant is to be believed, and all justifiable inferences are to be drawn in his favor.'" McAirlaids, Inc. v. Kimberly–Clark Corp., No. 13-2044, 2014 WL 2871492, at *1 (4th Cir. June 25, 2014) (internal alteration omitted) (citing Tolan v. Cotton, 134 S. Ct. 1861, 1863 (2014) (per curiam)). Moreover, "[c]redibility determinations, the weighing of the evidence, and the drawing of legitimate inferences from the facts are jury functions, not those of a judge . . . ." Anderson, 477 U.S. at 255. However, the non-moving party "must set forth specific facts that go beyond the 'mere existence of a scintilla of evidence.'" Glynn, 710 F.3d at 213 (quoting Anderson, 477 U.S. at 252). Instead, the non-moving party must show that "there is sufficient evidence favoring the nonmoving party for a jury to return a verdict for that party." Res. Bankshares Corp. v. St. Paul Mercury Ins. Co., 407 F.3d 631, 635 (4th Cir. 2005) (quoting Anderson, 477 U.S. at 249). "In other words, to grant summary judgment the [c]ourt must determine that no reasonable jury could find for the nonmoving party on the evidence before it." Moss v. Parks Corp., 985 F.2d 736, 738 (4th Cir. 1993) (citing Perini Corp. v. Perini Const., Inc., 915 F.2d 121, 124 (4th Cir. 1990)).

II. Negligent Design

The parties agree that Virginia law controls the resolution of this diversity action. With respect to Count I alleging negligent design, the court finds that there are genuine issues of material fact precluding it from granting summary judgment. To prevail in a

products liability case alleging negligent design under Virginia law, "the plaintiff must prove that the product (1) contained a defect (2) which rendered it unreasonably dangerous for ordinary or foreseeable use. In addition, the plaintiff must establish that (3) the defect existed when it left the defendant's hands and that (4) the defect actually caused the plaintiff's injury." Alevromagiros v. Hechinger Co., 993 F.2d 417, 420 (4th Cir. 1993) (applying Virginia law) (numerals added); Redman v. John P. Brush and Co., 111 F.3d 1174 (4th Cir. 1997) (applying Virginia law). Virginia law does not require manufacturers to adopt the safest conceivable design. Redman, 111 F.3d at 1177-78. Instead, manufacturers are required to design products that meet prevailing safety standards at the time the product is made. Sexton v. Bell Helmets, Inc., 926 F.2d 331, 336–37 (4th Cir. 1991). In determining whether a product's design meets those standards, a court should consider whether the product fails to satisfy (1) applicable industry standards, (2) applicable government standards, or (3) reasonable consumer expectations. Id. The issue whether a product is unreasonably dangerous is a question of fact. See Singleton v. International Harvester Co., 685 F.2d 112, 115 (4th Cir. 1981).

In Virginia, consumer expectations, which may differ from government or industry standards, "may be proved from evidence of actual industry practices, knowledge at the time of other injuries, knowledge of dangers, the existence of published literature, and from direct evidence of what reasonable purchasers considered defective at the time." Sexton, 926 F.2d at 337. That said, an individual's subjective expectations are insufficient to establish what degree of protection society expects from a product. See Redman, 111 F.3d at 1181 (distributor's testimony that based upon a safe's advertisement, warranty, and appearance, he

expected it would protect valuables better was insufficient by itself to establish reasonable consumer expectations); see also Evans v. Nacco Materials Handling Grp., Inc., 295 Va. 235, 247, 810 S.E.2d 462, 470 (2018) (holding that "[p]ublished literature may include, among other sources, marketing, advertising, presentation, promotional materials, product manuals, and instruction booklets). These types of evidence are probative when they establish what society demands or expects from a product. Sexton, 926 F.2d at 337 (holding that "an examination of societal standards at any given point in time usually reveals an expectation that balances known risks and dangers against the feasibility and practicability of applying any given technology"). The Fourth Circuit has recognized that the reasonable expectations of consumers may provide the sole criteria for unreasonable danger. See Hambrick ex rel. Hambrick v. Ken-Bar Mfg. Co., 422 F. Supp. 2d 627, 634 (W.D. Va. 2002).

Even where a plaintiff can prove that reasonable consumers expected a safer design, Virginia law holds that a design is not objectively unreasonable unless the plaintiff can show that an alternative design is safer overall than the design used by the manufacturer. Evans, 295 Va. at 249, 810 S.E.2d at 471 ("With respect to the modification of a design with safety implications . . . the plaintiff must establish that the proposed design modification is safer than the design used by the manufacturer."). Important in this regard is that an alternative design must not be an altogether essentially different product. Indeed, as has been often stated, "[a] motorcycle could be made safer by adding two additional wheels and a cab, but then it is no longer a motorcycle." Caterpillar, Inc. v. Shears, 911 S.W.2d 379, 385 (Tex. 1995); see also Kimball v. RJ Reynolds Tobacco Co., 2006 WL 1148506, 2006 U.S. Dist. LEXIS 27138 (W.D. Wash. Apr. 26, 2006) (noting that "'[t]wo-wheeledness' is an essential

characteristic of a motorcycle"). In other words, "an alternative design is not reasonable if it alters a fundamental and necessary characteristic of the product." Torkie-Tork v. Wyeth, 739 F. Supp. 2d 895, 900 (E.D. Va. 2010). This is, of course, typically a question of fact, not law. Kimball, 2006 WL 1148506, at *3, 2006 U.S. Dist. LEXIS 27138, at *8.

Finally, under any theory of tortious injury, one requisite element of a claim is a "causal connection between defendant's conduct and plaintiff's injury." Owens v. Bourns, Inc., 766 F.2d 145, 151 (1985). "The law of products liability in Virginia does not permit recovery where responsibility is conjectural." Boyle v. United Technologies Corp., 792 F.2d 413, 415 (4th Cir. 1986). While it is not necessary to establish causation with such certainty as to exclude every other possible cause, White Consol. Indus., Inc. v. Swiney, 237 Va. 23, 28, 376 S.E.2d 283, 285–86 (1989), "expert testimony is often utilized to establish causation." Wright v. Lilly, 66 Va. Cir. 195 (2004) (citing Charles E. Friend, Personal Injury Law in Virginia, § 19.1 (3rd ed. 2003). Indeed, such "[e]xpert testimony is usually necessary in products liability cases to establish defectiveness or dangerousness of the product, causation, etc. [Very] rarely is lay testimony alone sufficient." Id. Issues of negligence and proximate causation ordinarily are questions of fact for the jury's determination; courts decide these issues only when reasonable persons could not differ." Atkinson v. Scheer, 256 Va. 448, 453–54, 508 S.E.2d 68, 71 (1998) (quoting Brown v. Koulizakis, 229 Va. 524, 531, 331 S.E.2d 440, 445 (1985)).

With respect to the negligent design claim alleged in Count I, Savage makes three principal arguments on summary judgment: (1) neither Putman nor his expert considered or presented evidence related to any industry standards or consumer expectations when

analyzing the 416R steel alloy or 10ML-II muzzleloader, ECF No. 82, at 7; (2) Putman has failed to (a) produce evidence of a suitable alternative design, (b) demonstrate that a different steel "would have actually prevented the accident in question," or (c) conduct a risk-utility analysis of the subject barrel or an alternative, ECF No. 62, at 17; and (3) Putman's expert witness, Dr. Alan Druschitz, has (a) failed to offer proof of causation, (b) account for Putman's alleged misuse of the 10ML-II, or (c) "rule out [other] potential causes." Id. at 16-19. With regards to causation, Savage further alleges that Putman's use of a "non-recommended," purportedly "improper" load (bore-sized .50 (or .499)) caliber PowerBelt bullet) at the time of his accident, in contravention of "instructions and warnings" issued by Savage and PowerBelt, constitutes an intervening and superseding cause of the accident. Id. at 20. The court rejects each of these arguments.

A.

With respect to industry standards, Savage is correct that Putman, at best, equivocates on this issue. On the one hand, Putman claims that "no industry standards specific to smokeless muzzleloaders exist" as Savage is the only manufacturer of such muzzleloaders. ECF No. 13, at 21. To explain the absence of an industry standard, Putman cites a letter from former Savage CEO Ronald Coburn in which Coburn states, "[t]he firestorm over the introduction of a smokeless rifle has hardly just begun, evidenced by recent articles and letters directed to myself about how Savage is about to commit industry suicide with this product." ECF No. 78-5 (Ex. 17). In short, while it is admitted that there is no applicable industry standard, Putman explains that this is so because smokeless muzzleloaders were considered dangerous, and their production ill-advised. On other hand, Putman claims his

expert, Dr. Druschitz, is prepared to testify that Savage violated an industry standard by misspecifying the "minimum yield strength," a metric indicating how much metal can stretch before it breaks, of 416R steel by a factor of ten. Id.; ECF No. 78-1, at 41 (Ex. 7). In his report, titled "Failure Analysis of a Savage Arms 10ML-II Muzzleloader Serial Number M008570," Dr. Druschitz, in relevant part, states the following vis-à-vis the yield strength: "The Savage Arms Material Specifications Report dated 09-Sep-02 incorrectly specifies the minimum yield strength to be taken at 2% offset; the industry standard takes the yield strength at 0.2% offset." ECF No. 71-1, at 41 (Ex. 7). Yet, immediately beneath this claim, Dr. Druschitz states, "[t]here is no industry accepted standard for 416R stainless steel; 416R is not a UNS (Unified Numbering System) specification number." Id. In short, Putman has not identified a specific industry (or government) standard, nor clearly or consistently articulated a violation thereof.

Where, as here, no defect can be established on the basis of industry (or government) standards, the final step is to examine whether the product failed to satisfy consumers' reasonable expectations. See, e.g., Norris v. Excel Indus., Inc., 139 F. Supp. 3d 742, 751 (W.D. Va. 2015), aff'd, 654 F. App'x 588 (4th Cir. 2016). This element, as previously discussed, can be met through evidence of "actual industry practices, knowledge at the time of other injuries, knowledge of dangers, the existence of published literature, and from direct evidence of what reasonable purchasers considered defective at the time." Id. Here, Putman stands on firmer ground. As an initial matter, contrary to Savage's assertion that consumer expectations must be proven through expert testimony only, the case law clearly indicates that direct evidence or circumstantial of what reasonable purchasers considered defective at

the time is admissible. Id.; see Alevromagiros v. Hechinger, 993 F.2d 417, 420–421 (4th Cir. 1993); Tunnell v. Ford Motor Co., 330 F. Supp. 2d 707, 715 (W.D. Va. 2004) (holding that in "products liability cases alleging an unreasonably dangerous design defect under Virginia law, direct and circumstantial evidence of reasonable consumer expectations of safety standards is admissible to show defectiveness").

Putman argues that "[h]undreds of customers experienced bulged, split, and exploding 10ML-II barrels," and "[i]t was obvious that consumers would not expect their metal barrels to explode." ECF No. 73, at 14. While obviousness itself is not evidence, Putman presented a sampling of customer complaints in which 10ML-II owners "expressed their surprise and outrage" about 10ML-II barrel failures. ECF No. 78-7 (Ex. 18). In several of these complaints, 10ML-II owners include photographs of bulged or split barrels, as well as express concerns for other hunters who might be injured by their 10ML-II muzzleloader if the firearm is not recalled or if a warning is not issued. Id. With respect to the use of the PowerBelt bullet specifically, Putman cites testing of "nonapproved bullets" (including PowerBelt bullets) conducted by Savage as part of its so-called "misuse testing" of "variation[s] in the way people load their guns." ECF No. 69-1, at 112 (Ex. A). Putman also cites "[n]umerous [internet] forums" in which non-recommended bullets and powders are recommended, and correspondence between Savage and outdoor writers who recommended or mentioned using PowerBelt bullets with their 10ML-II. ECF No. 69-4, at 33 (Ex. D); ECF No. 69-6, at 2 (Ex. F); ECF No. 69-7, at 6 (Ex. G). This direct and/or circumstantial evidence clearly engenders a genuine issue of material fact as to consumer expectations regarding the safety and performance of the 10ML-II generally and use of the PowerBelt

bullet specifically. Id. at 1-17. Moreover, an email from Coburn in which he refers to the barrel failure phenomenon as "split barrel syndrome" is, at a minimum, circumstantial evidence that Savage was aware of other injuries and/or potential dangers of 10ML-II use or misuse. ECF No. 78-3, at 1 (Ex. 14). [1]

B.

Virginia law holds that "[e]ven where a plaintiff can prove that reasonable consumers expected a safer design, we hold that a design is not objectively unreasonable unless the plaintiff can show that an alternative design is safer overall than the design used by the manufacturer." Evans v. Nacco Materials Handling Grp., Inc., 295 Va. 235, 249, 810 S.E.2d 462, 471 (2018). Savage cites several cases for the proposition that insofar as Dr. Druschitz posits an alternative design, there must be evidence that such design "would have prevented the accident." ECF No. 62, at 17 (citing, inter alia, Tunnell v. Ford Motor Co., 385 F. Supp. 2d 582, 584 (W.D. Va. 2005), aff'd, 245 Fed. Appx. 286 (4th Cir. 2007) ("[I]t is a basic concept embedded in any defectiveness analysis, requiring that a proposed alternative design actually cure a product of its alleged defects."). Savage then cites the following concession by Dr. Druschitz during his deposition as a fatal to Count I:

> **Q**: My question was a little different. Do you have any evidence you can point to that a different barrel steel would have – wouldn't have failed at the time of the incident when subjected to the forces that were inside Mr. Putnam's barrel?
>
> **A**: No.

[1] At this stage, the court assumes that there is a sufficient evidentiary foundation for these complaints and that they concern substantially and/or sufficiently similar barrel failures. Further, a proper foundation must be established for the Coburn email to be admissible at trial.

ECF No. 64-5, at 115-16 (Ex. E). While the safety standard is phrased somewhat differently across cases, in Evans v. Nacco Materials Handling Grp., Inc., the Supreme Court of Virginia articulated its safety requirement vis-à-vis reasonable alternative designs in less absolute terms than those advanced by Savage, stating "[w]ith respect to the modification of a design with safety implications . . . the plaintiff must establish that the proposed design modification is safer than the design used by the manufacturer." 252 Va. 60, 65, 471 S.E.2d 489, 492 (1996). The Evans court states elsewhere "that a design is not objectively unreasonable unless the plaintiff can show that an alternative design is safer overall than the design used by the manufacturer." Id. In other words, Virginia law requires the Putman prove that his proposed alternative design is "safer overall," not that the alternative would have "prevented" the injury or "cured" absolutely the alleged design defects.

Putman is able to carry his burden pursuant to this standard. Putnam first argues that the "best alternative design for a smokeless power muzzleloader is no design at all – a stance that the muzzleloader industry has taken since smokeless powder was invented." ECF No. 73, at 14. Here, Putman's ipse dixit regarding the "stance" taken by the industry, setting aside those statements contained in Coburn's email described supra, is unsupported by any citations to the record. However, Dr. Druschitz posits an alternative design and explains why it would render the barrel safer overall. Dr. Druschitz states the following:

> The material used for the Savage Arms 10ML-II muzzleloader was a poor choice due to its inherent low fracture toughness and anisotropic properties. To overcome the inherent mechanical properties of this steel, the following methods could be used: 1) increase the wall thickness to reduce the applied stress to below the value required to initiate the nucleation of cracks in the gun barrel environment, 2) heat treat the material to a hardness or microstructure that has higher fracture

> toughness (a lower strength material would have higher fracture toughness but the wall thickness would probably have to be increased to reduce the applied stress), 3) reduce the stress concentration produced by the rifling by using a larger radius at the notch/corner, and 4) cold work the internal bore surface to create compressive residual stresses that would effectively lower the stress at the inside bore surface, and thus, reduce the tendency to initiate microcracks. Another alternative is to use a different steel, such as a low alloy, carbon steel like UNS G41400, UNS G41500 or UNS G43400, which have a better combination of strength and fracture toughness and less anisotropic mechanical properties since these steels have low levels of sulfur, and thus, fewer manganese sulfide inclusions.

ECF No. 78-1, at 44-46 (Ex. 7). This portion of Dr. Druschitz's report provides a "safer" alternative design, i.e., use of a tougher steel. Id. In an affidavit clarifying deposition testimony, Dr. Druschitz explains that alternative materials at the same strength as the 416R steel used in the 10ML-II "would have greater ductility and greater toughness," and that "these alternative barrel steels or treatments would have been likely to prevent the rupture that occurred and to decrease the likelihood of injury . . . ." ECF No. 73-13, at 4 (Ex. 22).

Finally, Virginia law does not always require quantitative evidence as to the risk-utility analysis. Ford v. Bartholomew, for example, upheld expert testimony that a gear shift "does not conform with what I consider to be safe engineering standards," even when that expert had not offered any risk-benefit test results to verify his theory. 224 Va. 421, 297 S.E.2d 675 (1982). Indeed, other Virginia cases have not required quantitative risk-benefit analysis when there is evidence that the proposed alternative design was used in other products. See Lust v. Clark, 792 F.2d 436 (4th Cir. 1986) (a proposed alternative pinch point placement and guarding device were implemented by other manufacturers); Blevins v. New Holland, 128 F.Supp.2d 952 (W.D. Va. 2001) (a plaintiff's alternative emergency stop design, while not

used on agricultural equipment, was used on industrial equipment); Chestnut v. Ford Motor Co., 445 F.2d 967 (4th Cir. 1971) (evidence of an alternative device more reliable than a solenoid was found sufficient to impose liability for a malfunctioning headlight closing lid). Dr. Druschitz notes, and the record suggests, that not only did "Savage Arms provide test data showing that 416R stainless steel could be heat treated to form a different microstructure and hardness and this material produced a more durable gun barrel compared to the current material," but in fact (2) ". . . [did] produce[] the 10ML-II muzzleloader in a chrome moly steel" (4140 carbon steel) with "greater fracture toughness," all suggesting that "alternative materials are feasible." ECF No. 78-1, at 41, 46 (Ex. 7); ECF No. 65-1, at 51. To the extent a risk-utility analysis is required, Dr. Druschitz's analysis suffices.

C.

Finally, Savage alleges that Putman has failed to offer sufficient proof of causation, and that his multiple misuses of the 10ML-II were unforeseeable as a matter of law. ECF No. 82, at 10-11. Savage claims that the confluence of Putman's misuses, which were warned against in the manual, resulted in the separation of the PowerBelt projectile from its plastic base and movement of the bullet down the barrel. The misuses alleged by Savage include Putman's:

> (1) Failure to ever clean the barrel or the muzzleloader.
> (2) Failure to properly check to be sure the barrel was empty because his ramrod was not marked and he had an after-market accessory attached to it, all prior to loading the rifle on Sunday night.
> (3) Loading of the muzzleloader on Sunday night in the cabin instead of when he was ready to shoot it.
> (4) Use an amount of powder in excess of the maximum recommended amount in the manual.
> (5) Use a bore-sized unsaboted bullet.

(6) Use a bullet that had a plastic sub-base.
(7) Utilization of a bullet of a weight not listed in the manual.
(8) Use of a PowerBelt bullet with smokeless powder.
(9) Transportation of a loaded muzzleloader, angled down, in a scabbard affixed to a mule as he rode up a rocky and steep mountain.

Id. at 9. With respect to the question of proof, both parties have proffered extensive evidence in support of conflicting theories as to what caused the barrel failure at the heart of this case. Savage's "air gap" theory posits that the aforementioned misuses of the 10ML-II muzzleloader caused the separation of the "non-recommended" PowerBelt bullet from its sub-base, leading to an "obstruction and an air gap." ECF No. 82, at 8. Savage's expert, Dr. Sam Fadala, is prepared to testify that this air gap resulted in an over-pressure event, which in turn caused Putman's barrel to fail. Id. at 8. Savage's second expert, Steven Rodgers, is expected to testify that subjecting a loaded muzzleloading rifle to five days of vibration and shaking while it was in a scabbard likely caused the bullet to separate and/or migrate off the powder charge, creating the aforementioned obstruction. ECF No. 62, at 10.

Putman claims that his evidence and expert (1) support an "embrittlement"/"barrel fatigue" theory as the only possible cause of the accident and (2) undermines Savage's "air gap" theory. Putman has provided ample evidence supporting this embrittlement theory. Dr. Druschitz report claims that the gun came apart because of "numerous cracks" running along the length of the barrel. ECF 78-1, at 45 (Ex. 7). According to Dr. Druschitz, these cracks were mostly along the corner of the barrel's rifling, which is an area where stresses on the barrel were concentrated, and grew when the gun was fired, eventually leading to the barrel burst that injured Putman. Id. With respect to the fractures Dr. Druschitz observed during his examination of the barrel in question, Savage claims that that Dr. Druschitz does

not actually know when such cracks in the barrel were "actually initiated," i.e., whether they were caused by the barrel failure or, whether, as Putman alleges, contributed to the barrel failure. ECF No. 62, at 19. Dr. Druschitz explained that the cracks, "to a reasonable degree of engineering probability, formed before the fracture event." ECF No. 73-13, at 3. The basis for this opinion is adequately and specifically explained in his affidavit. Id. Dr. Druschitz explains: (1) a single event is unlikely to create the number of cracks were observed on the inside of the gun barrel; (2) "steps" on the final fracture surface indicate multiple cracks grew over time and joined in the final fracture event; (3) some cracks exhibit intergranular fracture adjacent to the gun barrel surface that are typical of pre-existing cracks that later caused the final fracture; (4) the bore-adjacent intergranular fracture indicates these crack[s] had long-term exposure to low melting point metals; and (5) another 10ML-II stainless steel barrel exhibits similar cracking inside the barrel, without having bulged, split, or burst. Id. In short, construing the evidence in plaintiff's favor, there is undoubtedly a genuine issue of material fact as to the cause of the barrel failure in question.

Further, Putman claims that whether any of the alleged misuse in fact constitutes misuse at all and/or unforeseeable misuse presents, at a minimum, a genuine issue of material fact. The court agrees. Virginia case law distinguishes between foreseeable and unforeseeable misuse of a product. On the one hand, foreseeable misuse will not defeat a claim for breach of warranty (or a negligence theory of liability). See Jeld-Wen, 256 Va. at 148, 501 S.E.2d at 396. On the other hand, using a product "in a manner which the seller could not have reasonably foreseen" bars a claim for breach of warranty (or negligent design). Fournier Furniture, Inc. v. Waltz-Holst Blow Pipe Co., 980 F. Supp. 187, 190 (W.D.

Va. 1997); see also Turner v. Manning, Maxwell & Moore, Inc., 216 Va. 245, 252, 217 S.E.2d 863, 869 (1975) ("The implied warranty does not apply when the product is being used in a manner or for a purpose for which it was not intended."). Typically, whether misuse is foreseeable is a question for the jury, Tunnell v. Ford Motor Co., 330 F. Supp. 2d 748, 756–57 (W.D. Va. 2004), unless there is no genuine dispute about the issue or "a reasonable jury could reach only one conclusion." Norris, 139 F.Supp 3d at 747. With respect to the manifold "misuses" alleged by Savage, including the use of the "non-recommended" PowerBelt bullet, the court cannot rule as a matter of law that such conduct constitutes an (1) intervening or superseding cause of the accident or (2) unforeseeable misuse. Indeed, the relevance of the alleged, unforeseeable misuses turns on a finding that such misuse caused and/or contributed to the barrel failure in question. In other words, the underlying genuine issue of material fact related to causation would need to be resolved before finding that the alleged misuses, assuming unforeseeably, preclude a finding of proximate causation. What is more, in his motion for partial summary judgment, Putman adequately demonstrates there is a genuine issue of material fact as to whether the use of a PowerBelt bullet was unforeseeable.

While the court cannot find the alleged misuses superseding and/or unforeseeable, neither can it hold as a matter of law, as Putman wishes, that the use of the PowerBelt bullet, etc. was foreseeable. Putman's argument in its motion for partial summary judgment distills down to a single sentence: " . . . Putman had loaded it [his 10ML-II] with a smokeless gunpowder that Savage recommended, measured in a way that Savage recommended, and with a PowerBelt brand of bullet that, while not recommended in the Manual . . . Savage

knew would be used in its 10ML-II rifles." ECF No. 69, at 4. In support of his claim that Savage "knew" the PowerBelt would be used or was being used, Putman claims: (1) Savage tested PowerBelt bullets as part of its practice of testing, or so-called "misuse testing," (2) corresponded with outdoor writers who recommended or mentioned using PowerBelt bullets, and (3) became aware that its customers used "other non-recommended bullets from letters, product reviews, and internet forums it monitored." ECF No. 69 at 4-5. Lastly, Putman claims the 10ML-II manual specifically "contemplates," and even "condones," consumer experimentation with load combinations other than those prescribed in the manual. Id.

Savage responds by leaning heavily on the explicit language in the manual stating, "Use smokeless powder loads with saboted .45 caliber bullets only." Savage claims that this warning, in no uncertain terms, proscribes the use smokeless power with a bore-sized (or near bore-sized) PowerBelt bullet. Savage also argues that Putman's reliance on language in the manual suggesting customers "try loading one or two grains more or less of these powders with saboted bullets of similar weights and diameters" to buttress his theory that the manual endorsed deviations from the explicit language above is specious. First, Savage correctly points out that Putman cites no basis for the claim that this language would be understood by consumers to "condone" the use of a PowerBelt bullet, which is a bore-sized, .499 diameter bullet. Indeed, Putman simply states, as a matter of fact, that "Putman's bullet was 'of similar weight[]" and "of similar . . . diameter[]." ECF No. 69, at 10. It is possible, of course, that a muzzleloader owner would recognize that a .45 caliber projectile and a .499 caliber projectile are entirely dissimilar in size. Further, Putman cites no authority for the

proposition that Internet articles and/or forum posts suggesting off-manual usage renders a consumer's disregard of explicit language in the manual foreseeable as a matter of law. The court's finding that neither party is entitled to judgment as matter of law as to proximate causation and the foreseeability of alleged misuses, including the use of the PowerBelt bullet, is amply supported in the case law. See, e.g., Tunnell v. Ford Motor Co., 330 F. Supp. 2d 748, 756 (W.D. Va. 2004) ("The issue of the speed of the vehicle is relevant to the issue of unforeseeable misuse and causation which are properly questions for the jury."); Freeman v. Case Corp., 924 F. Supp. 1456, 1472 (W.D. Va. 1996) ("[T]he issue of foreseeable misuse was properly left for the jury."); see also Wilhelm v. Ameristep Corp., No. 7:15-CV-00362, 2018 WL 6272911, at *19–20 (W.D. Va. Nov. 30, 2018).

III. Willful & Wanton Failure to Warn

Under Virginia law, a product manufacturer is liable for negligent failure to warn when it "(a) knows or has reason to know that the [product] is or is likely to be dangerous for the use for which it is supplied, and (b) has no reason to believe that those for whose use the [product] is supplied will realize its dangerous condition, and (c) fails to exercise reasonable care to inform them of its dangerous condition or of the facts which make it likely to be dangerous." Featherall v. Firestone Tire and Rubber Co., 219 Va. 949, 962, 252 S.E.2d 358 (1979) (quoting Restatement (Second) of Torts § 388 (1965)). This duty to warn "stems from the view that the manufacturer should have superior knowledge of his product and it extends not only to the immediate purchaser but to other persons who might in the ordinary and natural course of events be subjected to danger." Id.

In Virginia, punitive damages are available only when the defendant has acted with actual malice or with wanton and willful disregard for his actions. Wallen v. Allen, 231 Va. 289, 297, 343 S.E.2d 73 (1986). "Willful or wanton conduct imports knowledge and consciousness that injury will result from the act done." Id. Simple and even gross negligence is not enough. See Ford Motor Co. v. Bartholomew, 224 Va. 421, 436–37, 297 S.E.2d 675 (1982) (striking punitive damages arising out of an automobile manufacturer's negligent design of a parking gear and negligent failure to correct or warn of the defect). Conduct that evinces some concern for the safety of others, such as attempts to neutralize dangers once they are known, will weigh against an award of punitive damages. See Philip Morris, Inc. v. Emerson, 235 Va. 380, 409, 368 S.E.2d 268 (1988). In Count III, Putman alleges, albeit ambiguously, both (1) point-of-sale and (2) post-sale duty to warn claims, as well as a willful and wanton disregard of said duties permitting an award of punitive damages. The court finds no support in the record for the notion that there was a willful and wanton failure to warn at the point-of-sale. Indeed, at most, Putman has alleged that certain instructions and/or warnings in the manual were ambiguous, "inadequate," or being disregarded by 10ML-II. ECF No. 73, at 10. The extensive manual does not evince a conscious disregard for consumer safety. In its opposition to Putman's motion for partial summary judgment, Savage recapitulates salient warnings in the manual regarding the use of recommended projectiles and powders. ECF No. 70, at 3. In light of subsequent consumer misuse of the 10ML-II, the instructions appear to be, at most, negligently defective. That said, there is a genuine issue of material fact as to whether there was a wanton post-sale failure to warn.

Savage argues that the Supreme Court of Virginia has never formally adopted the duty to make post-sale warnings regarding product dangers that come to light after the initial sale, and therefore Putman's post-sale claim is not cognizable in Virginia. See Royal Indem. Co. v. Tyco Fire Prods., LP, 281 Va. 157, 169 n. 3, 704 S.E.2d 91 (Va. 2011) (declining to address appellant's argument that trial court improperly dismissed post-sale duty to warn claims); Harris v. T.I., Inc., 243 Va. 63, 72, 413 S.E.2d 605 (Va. 1992) (assuming without deciding that post-sale duty to warn exists). However, numerous federal courts interpreting Virginia law have assumed, that under the circumstances of their particular cases, the Virginia Supreme Court would have adopted the doctrine, and have therefore applied it. See, e.g., Island Creek Coal Co. v. Lake Shore, Inc., 832 F.2d 274, 280 (4th Cir.1987); King v. Flinn & Dreffein Engineering Co., No. 7:09–cv–00410, 2012 WL 4459568, *6–8 (W.D. Va. May 16, 2012); Rash v. Stryker Corp., 589 F.Supp.2d 733 (W.D. Va. 2008); McAlpin v. Leeds & Northrup Co., 912 F.Supp. 207 (W.D. Va. 1996). But see Estate of Kimmel v. Clark Equip. Co., 773 F.Supp. 828 (W.D. Va. 1991) (declining to apply a post-sale duty to warn under Virginia law).

Consistent with those opinions, the court assumes that that that Virginia would recognize a post-sale duty to warn. Nevertheless, the court must still determine whether such a duty would apply in this case. It is undisputed that the question of whether a post-sale duty to warn exists is a question of law. Kellermann v. McDonough, 278 Va. 478, 487, 684 S.E.2d 786 (2009) ("The issue of whether a legal duty in tort exists is a pure question of law . . . ."); Russell ex rel. Russell v. Wright, 916 F. Supp. 2d 629, 650 (W.D. Va. Jan. 4, 2013). The factors to evaluate when considering whether such a duty exists are: (1) whether the seller

knows or reasonably should know that the product poses a substantial risk of harm to persons or property; (2) those to whom a warning might be provided can be identified and can reasonably be assumed to be unaware of the risk of harm; (3) a warning can be effectively communicated to and acted on by those to whom a warning might be provided; and (4) the risk of harm is sufficiently great to justify the burden of providing a warning. Id. at 650-51. Savage avers that even if a post-sale duty to warn is recognized, there are no facts in the record upon which such a claim could be submitted to the jury. Here, Savage's argument is two-fold. First, Savage argues that the manual contains specific warnings about proper loading and the types of projectiles, powder, and sabots to utilize, and these warnings are sufficient under the circumstances, according to its warnings expert. ECF No. 62, at 15. Second, Savage claims that Putman's post-sale duty to warn claim is in fact a request for Savage to recall the 10ML-II muzzleloader, and no such duty to recall is recognized under Virginia law. ECF No. 62, at 15.

With respect to the latter assertion, Putman's claim is clearly disjunctive, stating "[i]nstead of properly warning its customers and the general public of the dangers or recalling the rifles . . . ." ECF No. 34. Regarding the former claim, Putman first asserts, and the court agrees, that there is a genuine issue of material fact as to the adequacy of Savage's warnings for reasons discussed infra. ECF No. 73, at 12. Second, Putman notes that Savage's warning expert, Dr. Stephen Young, opines only about the warnings in the materials that come with the new product, and is silent regarding the post-sale failure to warn once Savage learned either that those instructions were inadequate, or were being regularly ignored.

With respect to each of the four considerations above, the court comfortably concludes that there was a duty to provide a post-sale warning in this case. As to the first and second factors, Putman has set forth evidence, described supra, that Savage knew or reasonably should have known that hundreds of its barrels failed with smokeless powder, and that customers were potentially unaware of the risks due to deficiencies in the 10ML-II manual, and were making "mistakes" as a result of these deficiencies ECF No. 73, at 10. Additionally, Putman cites two such warnings[2] where the manufacturers of smokeless powders recommended by Savage expressly warn against their use in any muzzleloader, i.e., warn users not to follow Savage's recommendations. ECF No. 73-2 (Ex. 2(a)); ECF No. 73-3 (Ex. 3). Putman's theory, in essence, is that because Savage's recommendations require users to ignore other product warnings, Savage should have foreseen that these same users might ignore Savage's own product warnings and recommendations. In other words, Putman argues that it was foreseeable that an owner of a 10ML-II muzzleloader, inured to disregarding other muzzleloading product warnings, would discount Savage's recommendations regarding its own product without appreciating the risks of doing so.

With respect to the third factor, Putman claims that Savage withheld information about barrel bulges, splits, or bursts from consumers, waiting until November 2, 2017 to finally issue a "Safety Notice." ECF No. 73-11, at 2 (Ex. 16). Notwithstanding its dilatory response, Putman claims that Savage's decision to finally issue a safety reminder indicates that it was able to "effectively communicate[]" a warning had it chosen to do so earlier.

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[2] (1) The IMR smokeless powders that Savage recommended warn, "Never substitute this powder for black powder or any black powder substitute or use in muzzleloading firearms." ECF No. 73-2 (Ex. 2(a)). (2) The Alliant smokeless powder that Savage currently recommends warns, "Not for use in muzzleloader or black powder firearms." ECF No. 73-3 (Ex. 3).

Indeed, Putman states, "[j]ust as Savage was able to disseminate its November 2017 'Safety Notice,' Savage could have disseminated an appropriate warning when it knew about the dangers over a decade earlier." ECF No. 73, at 12. Putman does not explicitly address the fourth factor, i.e., whether the risk of harm is sufficient great to justify the burden of providing a warning, but construing the evidence in Putman's favor, it was clearly the case that the risk of harm was sufficient to justify the de minimis burden of issuing a warning similar to that contained in the November 2017 "Safety Notice." In short, the court finds that all four factors weigh in favor of finding a duty to make post-sale warnings.

Having determined the existence of a legal duty to warn of the dangers of barrel failure, the court must now evaluate whether Savage's warnings on this matter were adequate. See Russell v. Wright, 916 F. Supp. 2d 629, 653 (W.D. Va. 2013). Under Virginia law, the adequacy of a product's warnings is typically a question for the jury. Spruill v. Boyle–Midway, Inc., 308 F.2d 79, 86 (4th Cir.1962); Abbot v. American Cyanamid Co., 844 F.2d 1108, 1115 (4th Cir.1988). However, when reasonable minds could not disagree on the adequacy of a product's warning, the court may determine the issue as a matter of law. Id. In evaluating whether a warning is adequate under the circumstances, the relevant factors are "(1) whether it could be expected to catch the attention of a reasonable person; (2) whether it could be understood by a reasonable person; and (3) whether it gave a reasonable indication of the nature and extent of the potential danger." Franklin v. Home Depot U.S.A., Inc., 2007 WL 1725348, at *3 (W.D. Va. June 13, 2007) (quoting Pfizer Inc. v. Jones, 221 Va. 681, 272 S.E.2d 43 (1980)).

Savage contends that it specifically warned about and against misuses causing barrel failures in its manual and/or the possibility of injury from misuse through the following warnings:

> (1) IMPORTANT: DO NOT ATTEMPT TO LOAD AND SHOOT YOUR RIFLE UNTIL YOU HAVE THOROUGHLY READ THIS INSTRUCTION MANUAL AND ARE FULLY FAMILIAR WITH ITS CONTENTS. ECF No. 62-2, at 1.
>
> (2) "Use correct ammunition" as "[u]sing improper or incorrect ammunition can destroy a gun and cause serious personal injury." Id. at 3.
>
> (3) ALWAYS seat the projectile firmly over the powder charge. Any projectile that sits off of the powder charge will usually produce poor accuracy and could result in pressures high enough to burst the barrel and cause injury. Id. at 4.
>
> (4) [I]mproper seating of bullets . . . could result in damage to the rifle and serious injury or death to a shooter or by-stander." Id. at 5.
>
> (5) Be sure the barrel is clear of obstructions before shooting" and that obstructions "can cause dangerously increased pressure, causing the barrel to bulge or even burst when firing, which can cause injury to the shooter and bystanders. Id.

In addition to the above cautionary language, Savage again leans heavily on the following warning: "Use smokeless powder loads with saboted .45 caliber bullets only." Id. at 9. Taken together, Savage argues that there is no basis for a post-sale failure to warn claim because the warnings above sufficed to warn users of the potential consequences of misuse. ECF No. 82, at 4. Notwithstanding these warnings, Putman argues that Savage knew that users were continuously making the sort of "mistakes" that Savage claims caused the barrel defects, and that Savage was aware of approximately 300 claims of barrel damage from customers using

the 10ML-II rifle. ECF No. 73, at 10-11.[3] In light of the conflicting evidence and arguments concerning the adequacy of the above warnings, and Virginia's strong preference for having juries decide the question of a warning's adequacy, the court cannot conclude as a matter of law Savage's warnings were sufficient to foreclose a post-sale failure to warn claim.

Finally, Savage asks the court to rule that punitive damages are not available under the facts of this case as a matter of law. Savage argues that Putman has not established any basis for punitive damages, as the evidence reveals that Savage (1) designed, developed, and tested its muzzleloader design, (2) verified that the 416R steel met the specified metallurgical standards, (3) certified every barrel it manufactures as having been metallurgically tested and conforming to the material specification, (4) performed internal proof testing and function-testing on every muzzleloader it produced, (5) provided extensive instructions and warnings with its product, (6) continuously tested and verified its product to assess the integrity of its rifles under extreme conditions, and (7) sent fractured barrels to independent laboratories to have those barrels metallurgically tested. ECF No. 62, at 22. These actions, Savage claims, establish that it "showed significant care for the safety of its customers," precluding any claim for punitive damages. Id. Putman claims, however, that Savage willfully and wantonly "failed to change the design or warn consumers based on information only Savage had," including "direct knowledge of the danger from over three-hundred reports of barrel defects." ECF Nol. 73, at 19. Putman correctly notes that Savage's extensive testing is not probative as to the level of concern for safety once it knew its muzzleloaders were failing

[3] As noted on the issue of consumer expectations, this analysis presumes that Putman can lay a proper foundation for the admission of the evidence concerning prior barrel failures.

despite all of the aforementioned testing. The conflicting evidence produced from each side prevents the court from rendering a decision on the punitive damages claim at this point in the litigation. Viewing the evidence in the light most favorable to Putman, there remains a genuine issue of material fact about what Savage knew and when regarding barrel failure. Given such a conflict, and given the fact that certain of Savage's actions could be construed as in wanton disregard of the potential risks involved in the use of the 10ML-II muzzleloader, the motion for summary judgment on the punitive damages clam is denied.

IV. Implied Warranty of Merchantability

Under Virginia law, the "standard of safety of goods imposed on the seller or manufacturer of a product is essentially the same whether the theory of liability is labelled warranty or negligence or strict tort liability: the product must not be unreasonably dangerous at the time that it leaves the defendant's possession if employed in the manner in which it was intended to be used or put to a special use known beforehand by the defendant." Chestnut v. Ford Motor Co., 445 F.2d 967, 968 (4th Cir. 1971) (applying Virginia law) (emphasis added). Hence, for all the reasons stated supra supporting the court's denying summary judgment as to Count I, Savage's motion for summary judgment as to Count IV alleging a breach of implied warranty of merchantability is similarly **DENIED**.

In sum, Savage's motion for summary judgment is **DENIED** as to Counts I, III, and Count IV. Putman's motion for partial summary judgment is likewise **DENIED**.

It is **SO ORDERED**.

Entered: 03-01-2019

/s/ Michael F. Urbanski

Michael F. Urbanski
Chief United States District Judge